

MERCHANT & GOULD P.C.

United States Patent Application

DECLARATION

As a below named inventor, we hereby declare that: our residences, post office addresses and citizenships are as stated below next to our names; that

We verily believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled METHOD AND SYSTEM FOR CACHE MANAGEMENT ALGORITHM SELECTION, the specification of which is attached hereto.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (described hereinbelow).

We hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

- a. ☒ no such applications have been filed.  
b. ☐ such applications have been filed as follows:

| FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119         |                    |                                      |                                     |
|--|--------------------|--------------------------------------|-------------------------------------|
| COUNTRY  | APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | DATE OF ISSUE<br>(day, month, year) |
|  |                    |                                      |                                     |
| ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S) |                    |                                      |                                     |
| COUNTRY  | APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | DATE OF ISSUE<br>(day, month, year) |
|  |                    |                                      |                                     |

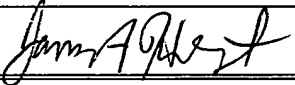


We hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | STATUS (patented, pending, abandoned) |
|-------------------------|-----------------------------------|---------------------------------------|
|                         |                                   |                                       |

We hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (Day, Month, Year) |
|-------------------------------------|-----------------------------------|
| 60/322,493                          | September 14, 2001                |

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|  |                            |   |                                      |                                      |
|--|----------------------------|---|--------------------------------------|--------------------------------------|
| 2  | Full Name<br>Of Inventor   | Family Name<br>Herbst                           | First Given Name<br>James            | Second Given Name<br>Arthur          |
| 0  | Residence<br>& Citizenship | City<br>Longmont                                | State or Foreign Country<br>Colorado | Country of Citizenship<br>USA        |
| 1  | Post Office<br>Address     | Post Office Address<br>2125 Sand Dollar Drive   | City<br>Longmont                     | State & Zip Code/Country<br>CO 80503 |
| Signature of Inventor 201:    |                            |   | Date: 11/29/01                       |                                      |
| 2  | Full Name<br>Of Inventor   | Family Name<br>Baum                             | First Given Name<br>Carol            | Second Given Name<br>Michiko         |
| 0  | Residence<br>& Citizenship | City<br>Longmont                                | State or Foreign Country<br>Colorado | Country of Citizenship<br>USA        |
| 2  | Post Office<br>Address     | Post Office Address<br>5671 Steeple Chase Drive | City<br>Longmont                     | State & Zip Code/Country<br>CO 80503 |
| Signature of Inventor 202:    |                            |   | Date: 11-29-01                       |                                      |
| 2  | Full Name<br>Of Inventor   | Family Name<br>Dixon                            | First Given Name<br>Robert           | Second Given Name<br>William         |
| 0  | Residence<br>& Citizenship | City<br>Longmont                                | State or Foreign Country<br>Colorado | Country of Citizenship<br>USA        |
| 3  | Post Office<br>Address     | Post Office Address<br>310 Widgeon Drive        | City<br>Longmont                     | State & Zip Code/Country<br>CO 80503 |
| Signature of Inventor 203:  |                            |   | Date: 11-29-01                       |                                      |

#### § 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) prior art found in search reports of a foreign patent office in a counterpart application, and

(2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application:

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|              |   |                 |           |
|--------------|---|-----------------|-----------|
| Inventor(s): | James Arthur Herbst, Carol Michiko Baum, Robert William Dixon |                 |           |
| Serial No.:  | Not known   | Examiner:       | Not known |
| Filed:       | Herewith  | Group Art Unit: | Not known |
| Title:       | METHOD AND SYSTEM FOR CACHE MANAGEMENT ALGORITHM SELECTION    |                 |           |
| Docket:      | STL10474/40046.174USU1  |                 |           |

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
(REVOCATION OF PRIOR POWERS)**

As assignee of record of the entire interest of the above identified application, all powers of attorney previously given are hereby revoked and the following practitioners/patent agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

|   |   |
|---|---|
| Shawn B. Dempster, Registration No. 34,321    | Edward P. Heller, III, Registration No. 29,075    |
| Jonathan E. Olson, Registration No. 41,231    | Raghunath S. Minisandram, Registration No. 38,683 |
| Derek J. Berger, Registration No. 45,401      | Paul T. Dietz, Registration No. 38,858            |
| Kirk A. Cesari, Registration No. 47,479       | Carol I. Bordas, Registration No. 37,284          |
| Mitchell K. McCarthy, Registration No. 38,794 |   |

And members of the firm of Merchant & Gould P.C.

|                             |                   |                           |                   |
|-----------------------------|-------------------|---------------------------|-------------------|
| Albrecht, John W.           | Reg. No. 40,481   | Jardine, John S.          | Reg. No. P-48,835 |
| Ali, M. Jeffer              | Reg. No. 46,359   | Johns, Nicholas P.        | Reg. No. 48,995   |
| Altera, Allan G.            | Reg. No. 40,274   | Johnston, Scott W.        | Reg. No. 39,721   |
| Anderson, Gregg I.          | Reg. No. 28,828   | Kadievitch, Natalie D.    | Reg. No. 34,196   |
| Batzli, Brian H.            | Reg. No. 32,960   | Kaseburg, Frederick A.    | Reg. No. 47,695   |
| Beard, John L.              | Reg. No. 27,612   | Kettelberger, Denise      | Reg. No. 33,924   |
| Berns, John M.              | Reg. No. 43,496   | Keys, Jeramie J.          | Reg. No. 42,724   |
| Branch, John W.             | Reg. No. 41,633   | Knearl, Homer L.          | Reg. No. 21,197   |
| Brown, Jeffrey C.           | Reg. No. 41,643   | Kowalchuk, Alan W.        | Reg. No. 31,535   |
| Bruess, Steven C.           | Reg. No. 34,130   | Kowalchuk, Katherine M.   | Reg. No. 36,848   |
| Byrne, Linda M.             | Reg. No. 32,404   | Lacy, Paul E.             | Reg. No. 38,946   |
| Campbell, Keith             | Reg. No. 46,597   | Larson, James A.          | Reg. No. 40,443   |
| Carlson, Alan G.            | Reg. No. 25,959   | Leonard, Christopher J.   | Reg. No. 41,940   |
| Caspers, Philip P.          | Reg. No. 33,227   | Liepa, Mara E.            | Reg. No. 40,066   |
| Clifford, John A.           | Reg. No. 30,247   | Lindquist, Timothy A.     | Reg. No. 40,701   |
| Cook, Jeffrey               | Reg. No. P-48,649 | Lown, Jean A.             | Reg. No. 48,428   |
| Daignault, Ronald A.        | Reg. No. 25,968   | Mayfield, Denise L.       | Reg. No. 33,732   |
| Daley, Dennis R.            | Reg. No. 34,994   | McDonald, Daniel W.       | Reg. No. 32,044   |
| Daulton, Julie R.           | Reg. No. 36,414   | McIntyre, Jr., William F. | Reg. No. 44,921   |
| DeVries Smith, Katherine M. | Reg. No. 42,157   | Mitchem, M. Todd          | Reg. No. 40,731   |
| DiPietro, Mark J.           | Reg. No. 28,707   | Mueller, Douglas P.       | Reg. No. 30,300   |
| Doscotch, Matthew A.        | Reg. No. P-48,957 | Nelson, Anna M.           | Reg. No. 48,935   |
| Edell, Robert T.            | Reg. No. 20,187   | Paley, Kenneth B.         | Reg. No. 38,989   |
| Epp Ryan, Sandra            | Reg. No. 39,667   | Parsons, Nancy J.         | Reg. No. 40,364   |
| Glance, Robert J.           | Reg. No. 40,620   | Pauly, Daniel M.          | Reg. No. 40,123   |
| Goff, Jared S.              | Reg. No. 44,716   | Phillips, John B.         | Reg. No. 37,206   |
| Goggin, Matthew J.          | Reg. No. 44,125   | Pino, Mark J.             | Reg. No. 43,858   |
| Golla, Charles E.           | Reg. No. 26,896   | Prendergast, Paul         | Reg. No. 46,068   |
| Gorman, Alan G.             | Reg. No. 38,472   | Pytel, Melissa J.         | Reg. No. 41,512   |
| Gould, John D.              | Reg. No. 18,223   | Qualey, Terry             | Reg. No. 25,148   |
| Gregson, Richard            | Reg. No. 41,804   | Reich, John C.            | Reg. No. 37,703   |
| Gresens, John J.            | Reg. No. 33,112   | Reiland, Earl D.          | Reg. No. 25,767   |
| Hamer, Samuel A.            | Reg. No. 46,754   | Samuels, Lisa A.          | Reg. No. 43,080   |
| Hamre, Curtis B.            | Reg. No. 29,165   | Schmaltz, David G.        | Reg. No. 39,828   |
| Harrison, Kevin C.          | Reg. No. 46,759   | Schuman, Mark D.          | Reg. No. 31,197   |
| Hertzberg, Brett A.         | Reg. No. 42,660   | Schumann, Michael D.      | Reg. No. 30,422   |
| Hillson, Randall A.         | Reg. No. 31,838   | Scull, Timothy B.         | Reg. No. 42,137   |
| Holzer, Jr., Richard J.     | Reg. No. 42,668   | Sebald, Gregory A.        | Reg. No. 33,280   |
| Hope, Leonard J.            | Reg. No. 44,774   | Skoog, Mark T.            | Reg. No. 40,178   |

Spellman, Steven J.  
Stewart, Alan R.  
Stoll-DeBell, Kirstin L.  
Sullivan, Timothy  
Sumner, John P.  
Swenson, Erik G.  
Tellekson, David K.  
Trembath, Jon R.  
Tunheim, Marcia A.  
Underhill, Albert L.  
Vandenburgh, J. Derek  
Wahl, John R.

Reg. No. 45,124  
Reg. No. 47,974  
Reg. No. 43,164  
Reg. No. 47,981  
Reg. No. 29,114  
Reg. No. 45,147  
Reg. No. 32,314  
Reg. No. 38,344  
Reg. No. 42,189  
Reg. No. 27,403  
Reg. No. 32,179  
Reg. No. 33,044

Weaver, Paul L.  
Welter, Paul A.  
Whipps, Brian  
Whitaker, John E.  
Wier, David D.  
Williams, Douglas J.  
Withers, James D.  
Witt, Jonelle  
Wu, Tong  
Young, Thomas  
Zeuli, Anthony R.

Reg. No. P-48,640  
Reg. No. 20,890  
Reg. No. 43,261  
Reg. No. 42,222  
Reg. No. P-48,229  
Reg. No. 27,054  
Reg. No. 40,376  
Reg. No. 41,980  
Reg. No. 43,361  
Reg. No. 25,796  
Reg. No. 45,255

CHANGE OF ATTORNEY'S/AGENT'S ADDRESS IN APPLICATION

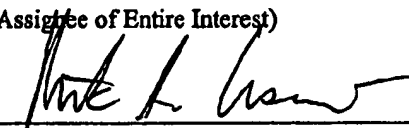
Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

STATEMENT UNDER 37 CFR 3.73(b)

Seagate Technology LLC states that it is the Assignee of Entire Interest in the patent application/patent identified above by virtue of an Assignment from the inventor(s) of the patent application/patent identified above. A copy of the Assignment is attached and/or was recorded in the Patent and Trademark Office at Reel , Frame .  
The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the Assignee.

Respectfully submitted,

SEAGATE TECHNOLOGY LLC  
(Assignee of Entire Interest)

  
Kirk A. Cesari, Reg. No. 47,479  
SEAGATE TECHNOLOGY LLC  
Intellectual Property - SHK2LG  
1280 Disc Drive  
Shakopee, MN 55379  
Telephone: 952.402.3534  
Facsimile: 952.402.2657

12-7-01  
Date.

# ASSIGNMENT

Attorney Docket No. :M&G40046.174USU

Seagate Docket No. : STL10474

WHEREAS, I/we James Arthur Herbst of 2125 Sand Dollar Drive, Longmont, CO 80503, Carol Michiko Baum of 5671 Steeple Chase Dr., Longmont, CO 80503, and Robert William Dixon of 310 Widgeon Drive, Longmont, CO 80503, are the inventor(s) of an invention entitled Method and System For Cache Management Algorithm Selection that is the subject matter of: (check all that apply)

- ☒ a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. 60/322,493 filed on September 14, 2001;
- ☒ an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. \_\_\_\_\_ filed on filed herewith and/or executed on even date herewith: and
- ☐ an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. \_\_\_\_\_ filed on \_\_\_\_\_; and/or executed on even date herewith:

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 920 Disc Drive, Scotts Valley, California, 95066 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

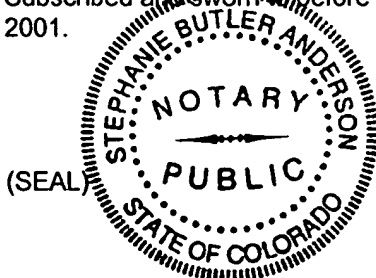
NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

I/We represent to the Assignee, its successors and assigns, that I/we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I/We, my/our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference, litigation or proceeding.

  
James Arthur Herbst(Inventor)

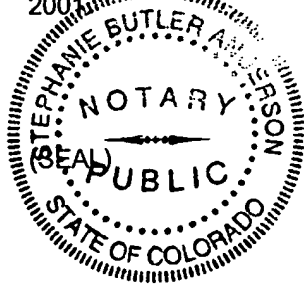
Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 29 day of November, 2001.



  
Notary Public  
MY COMMISSION EXPIRES 2/20/2005

CM Baum  
Carol Michiko Baum(Inventor)

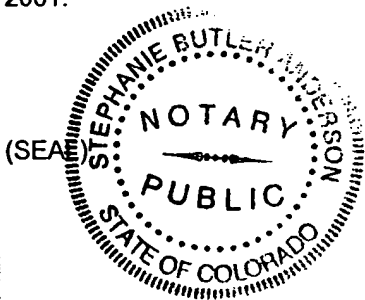
Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 3 day of December, 2001.



Stephanie Butler Anderson  
Notary Public  
MY COMMISSION EXPIRES 2/20/2005

Robert William Dixon  
Robert William Dixon(Inventor)

Subscribed and sworn to before me at Longmont, Colorado, a Notary Public, this 6th day of December, 2001.



Stephanie Butler Anderson  
Notary Public  
MY COMMISSION EXPIRES 2/20/2005